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SYSTEM FOR CODE DIVISION MULTI-ACCESS COMMUNICATION ABSTRACT OF THE DISCLOSURE

According to the present invention a received Direct Sequence Code Division Multi-Access (DS-CDMA) signal is differentially decoded at the chip level. A number of signaling schemes can be used in the invention including (1) an ON/OFF signaling scheme in which a pseudo noise number (PN) code is sent only in response to one data bit value, and no signal is sent in response to the other bit value; (2) a Two Code signaling scheme in which bit values of 1 triggers a first PN code to transmitted, and a bit value of O triggers a second PN code to be transmitted; and (3) an Mary signaling method in which a plurality of data bit patterns respectively, trigger a plurality of PN codes to be After differential decoding the received transmitted. signal is despread using one or more PN codes, that can be vector sums of two or more PN codes.